



TEACHER RESOURCES

Toads and Frogs of Missouri Poster
Photographs speak louder than words. Let students see 20 species of Missouri toads and frogs. Order from your education materials request form.

Talking Toad and Frog Cassette
Listen to the sounds of 20 Missouri toad and frog calls. Contact the NATURE SHOP at 573/751-4115 x325 to order your copy.

ADDITIONAL MUSTS
Conservation Consonants Poster features B, C, D, H, L, M, P, R, T and W.
More Conservation Consonants Poster features F, G, J, K, N, Q, S, V, X, Y and Z.

Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65102-0180

Do Not Forward-Address Cor-Return Guar

LOOKING AHEAD

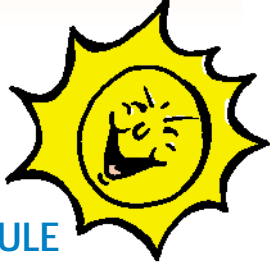
Summer issues will feature the following topics:

WOOLYWORM (K) will focus on food chains, energy cycles and predators.

TADPOLE (1) will cover insects and prairies.

CRAWDAD (2) will be on outdoor ethics, fishing and streams.

DON'T MISS THE
2000 **SUMMER**
WORKSHOP SCHEDULE
IN YOUR COPY OF
THE RESOURCE.



Conservation TEACHER

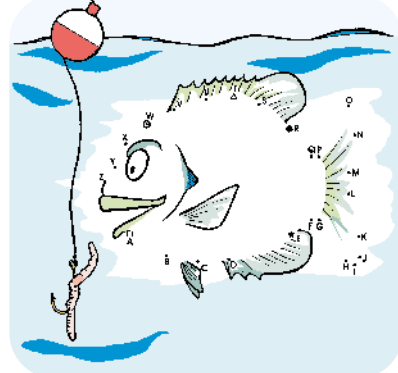
Spring is here! This issue of *Conservation Teacher* focuses on spring and plants and animals. Use our wonderful weather to discuss fishing and wildlife in water, toads and frogs, decaying logs and earthworms.

Earth Day is April 22!



What's for DINNER ?

Discuss fishing. What reasons do people have for fishing? Perhaps fun, food or relaxation. Some people fish for a living.



Have students talk about their own fishing experiences. Do they keep fish or release them?

If you like to eat fish, keeping the fish that are big enough to cook can provide a tasty meal. If you don't eat fish or give them to someone who does, then release the fish and pass along the fun of catching them.

APPLICATION

Bonus activities for school or home

Encourage students to go fishing with a grown-up.

Have students watch for signs of spring renewing itself (trees budding, flowers blooming, birds singing, etc.).



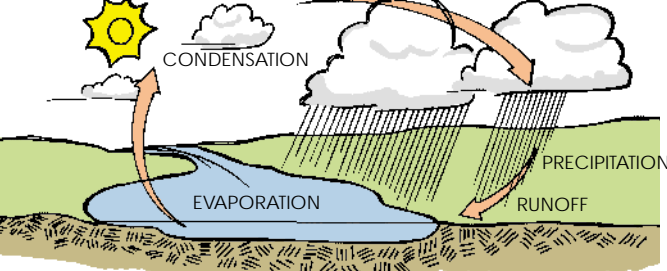
February
2000

WATER WAYS

Use a different color to trace each water path as it flows into a bigger stream.

Water from rain, snow and home use runs **downhill**. This is called **run-off**. This water joins other runoff and flows into bigger systems. Water that is continually flowing is considered a stream. All the land around joining streams is called a **watershed**. The water cycle continually **renews** itself from year to year.

Discuss the vocabulary words above.



Divide students into groups. Have the groups create a mural to show what happened to the water they brushed their teeth with that morning.



HOPPY SPRING

Spring is coming. This is the season we most closely associate with renewal and beginning life. How are our winter survivors doing? Spring is an active time at a pond. Turtles and frogs have rested at the bottom of the pond and now return to the surface. Dragonflies become active and eat other insects.

Encourage students to discuss and draw something that they like to do in the spring.

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FROAD AND TOG

MIX-UP

How are toads and frogs alike? How are they different?

ALIKE

TOAD

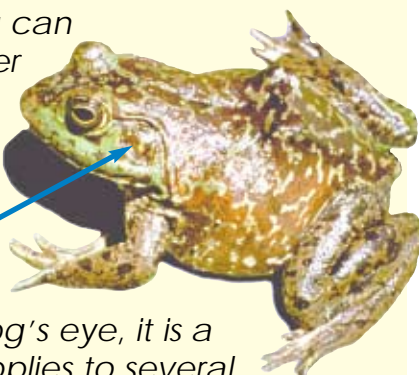
big eyes
fat, drier skin
warts
short hops

FROG

tadpoles
amphibian
tailless

little eyes
thin, wet skin
no warts
big jumps

Did you know you can determine whether a bullfrog is a male or female by looking at the size of its eardrum (tympanum)? If the eardrum is larger than the frog's eye, it is a male. This also applies to several other species of "true" frogs.



FROGWORD PUZZLE

Help students complete the puzzle, emphasizing vocabulary words as they continue.

Define:

Amphibians—adapted to life on land and in water

Gill—a feathery organ that lets animals, like fish and amphibians, get oxygen from water

Tadpole—a larval (baby) amphibian

G I L L S

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L A N D

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T O A D S

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A M P H I B I A N S

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E G G S

R

F R O G S

Tracks AND TRAILS

Pond activity increases in springtime. Animals come to the pond for food and drink. Areas around ponds are good places to find animal tracks.

Have students add the tracks to their picture.

EGGS IN JELLY

Create your own version of frog eggs by making this slimy mix.

Materials:

egg whites
peppercorns
bowl



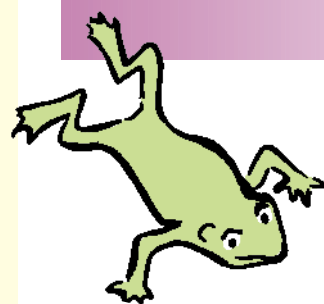
Place the peppercorns in the bowl, then pour the egg whites over. Have students touch the peppercorns. The sensation is similar to frog eggs in their jelly-like cases.

APPLICATION

Bonus activities for school or home

Students can create their toad abode and watch for toads in their backyard.

Students can look for tracks in their own yards. Can they tell what has been there?



Children's LITERATURE

Jump, Frog, Jump, by Robert Kalan

My River, by Shari Halpern

A River Ran Wild, by Lynne Cherry

Frog and Toad Are Friends, by Arnold Lobel

Days with Frog and Toad, by Arnold Lobel



GROUNDHOG Grammar

Unscramble the sentences. Have students create their own scrambled sentences about the picture.

The groundhog, also known as a woodchuck (*Marmota monax*), is a member of the squirrel family. Found from the eastern and central United States northward across Canada and into Alaska, groundhogs are animals of open fields and woodland edges. Groundhogs eat green plants, such as dandelion, clover and grasses. They mainly live on the ground but are good swimmers and climbers. They feed heavily in summer, storing fat to get them through their winter hibernation. They are also excellent diggers, constructing a burrow with a main entrance and an escape tunnel.

Here are some groundhog web sites you may wish to access to celebrate Groundhog's Day:

<http://www.stormfax.com/ghogday.htm>

(Find the history of this event.)

<http://www.groundhogs.com>

(Go to the links and find games to play.)

<http://www.geocities.com/Heartland/7134/Shadow/ghsundial.htm> (Quizzes and directions for making a model sundial)

WIGGLE WHILE YOU WORK

To develop a math lesson, weigh and measure the worms before adding them to the jar.

ARBOR DAY



To find out more about Arbor Day, write:

The Office for Human Resources
U.S. Fish and Wildlife Service
Department of the Interior
Washington, DC 20240

The first Arbor Day was held on April 10, 1872. More than 1 million trees were planted that day. Missouri Arbor day began in 1886. It is the first Friday in April.

LOG LUNCH

Discuss the breakdown of a rotting log. Do the disappearing log puzzle. Discuss why the log is completed in camouflage colors.



Discuss decomposition. Decomposers feed on dead organic material.

This helps put nutrients back into the soil. Decomposers play an important part in the food chain; plants can absorb nutrients from the soil and pass them along.



APPLICATION

Bonus activities for school or home

Have students look for rotting debris around their home. What types of wildlife do they see eating it?

Students, with the help of parents or guardians, can plant an Arbor Day tree.